

25th Annual Software Engineering Workshop

GSFC/Building 8

November 29-30, 2000

<http://sel.gsfc.nasa.gov>

Software Engineering Workshop

■ Proceedings

- ◆ Presenters' papers and slides available on SEL Web Site (sel.gsfc.nasa.gov) **next week**.
- ◆ Proceedings on CD-ROM mailed to all registrants in **March 2000**

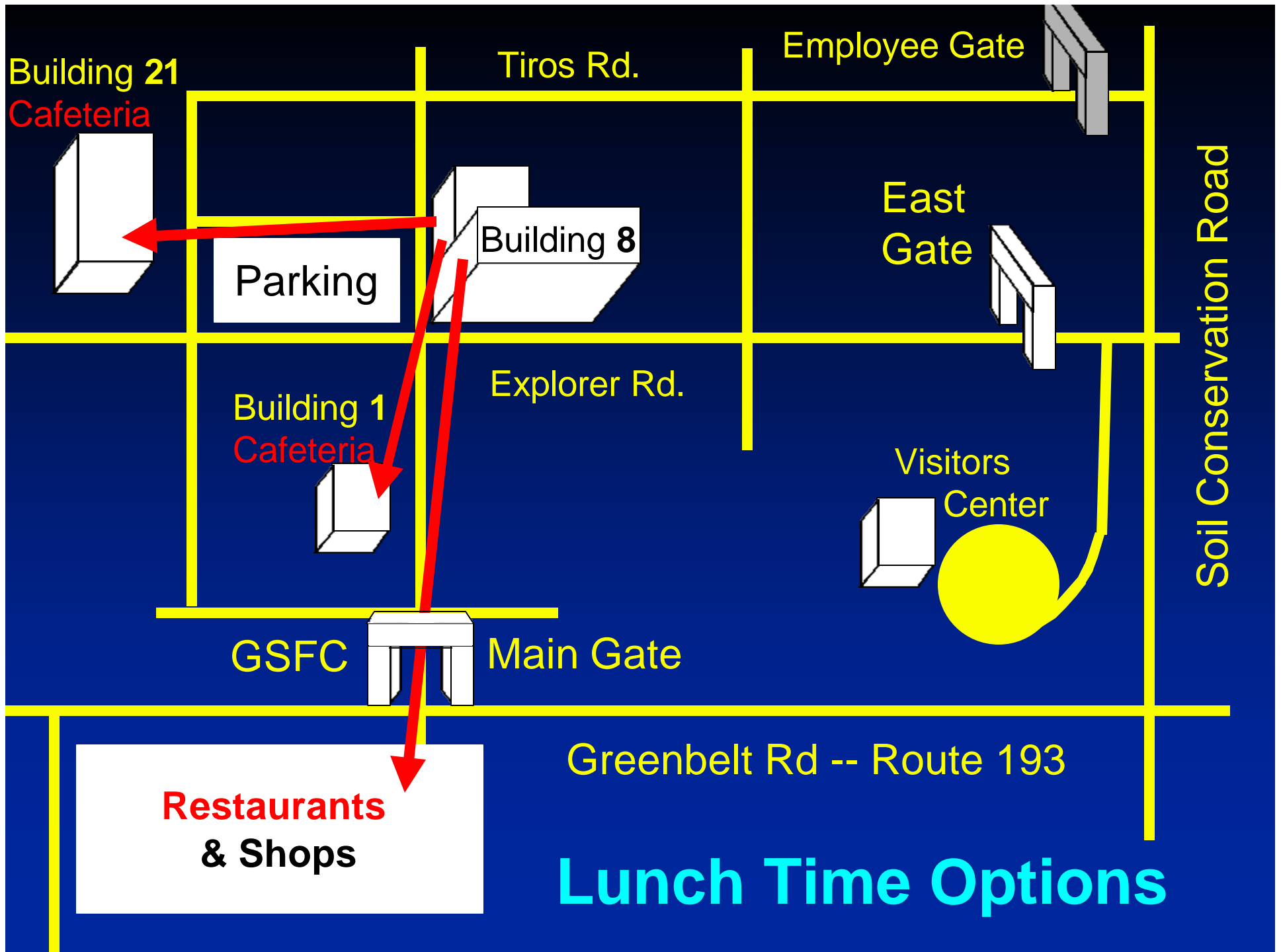
Software Engineering Workshop

■ Lunch

- ◆ Cafeterias in Building 1 & Building 21
- ◆ Off Center (map at Registration Desk)

■ Lunch for Speakers and Discussants

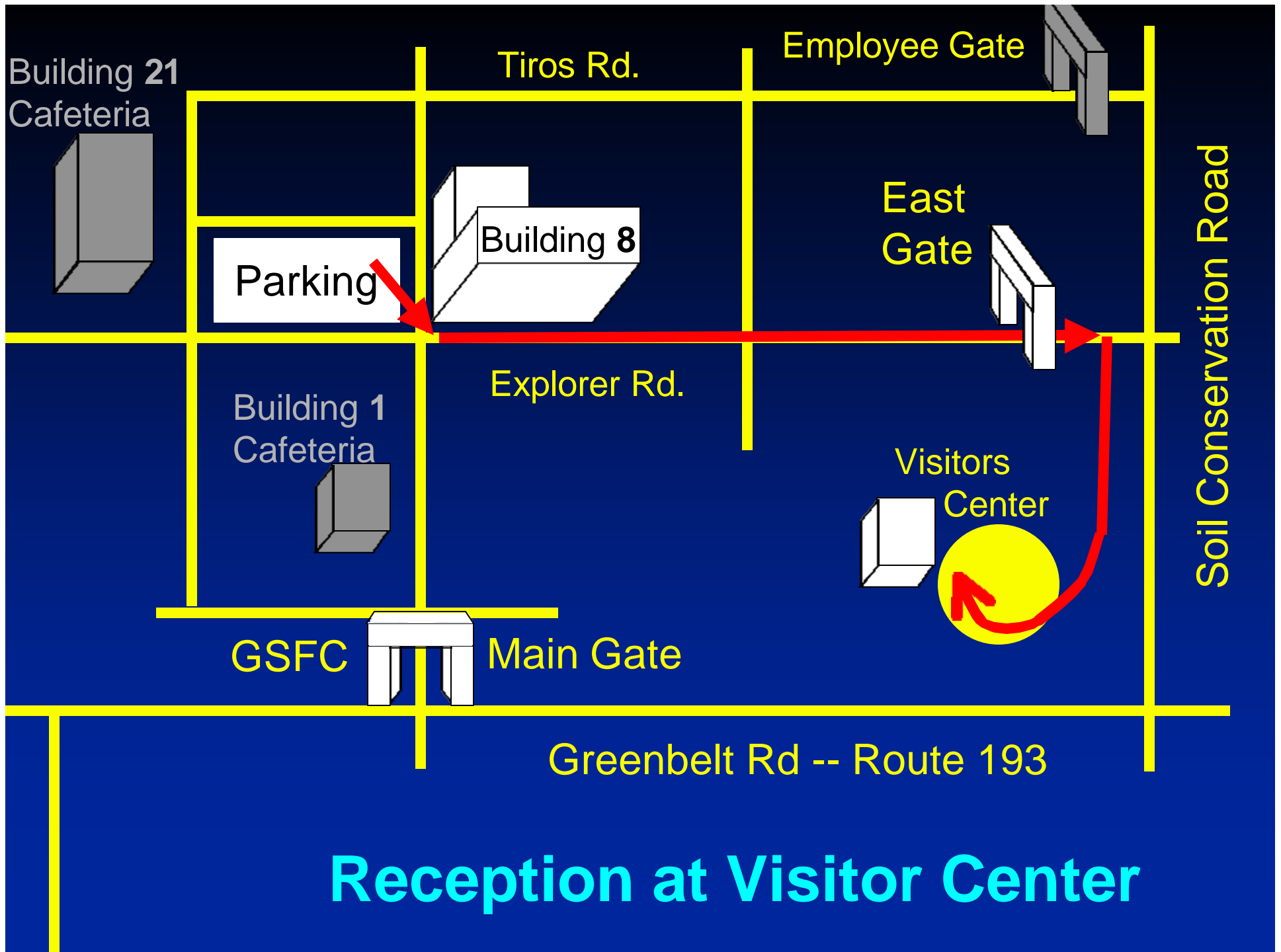
- ◆ Building 8, 3rd Floor



Software Engineering Workshop

■ Reception

- ◆ Today from 5:30 - 9:00 p.m.,
Goddard Visitor's Center
(map at Registration Desk)



The SEL after 25 years

- What remains the same?
 - ◆ Interaction with development organization
 - ◆ Measurement and experimentation
- What has changed?
 - ◆ We are not alone anymore
 - ◆ We have a new home
- This session: what are we doing now?

Interaction with development organization

- *Experience Factory*
- Research agenda aligned with and driven by organization goals
- Experimentation in production environment
- Attention to
 - ◆ Feedback from developers
 - ◆ Packaging & deploying validated results

Measurement & Experimentation

- *Quality Improvement Paradigm* for project and organizational learning
- Quantitatively assess claims for new process or technology
- Measurement of impact of process or technology change on product cost or quality

We are not alone!

■ Within NASA

- ◆ Software Working Group
- ◆ Center software engineering & assurance organizations

■ Changes outside NASA

- ◆ ISERN & Universities use empirical approach
- ◆ PSP includes measurement & feedback
- ◆ Measurement as a level 2 KPA in CMMI

The SEL in the Information Systems Center (ISC)

■ Key characteristics

- ◆ *Size*: ISC is a larger development organization
- ◆ *Diversity*: ISC has wider range of projects
- ◆ ISC emphasizes empowered *teams*

■ Current SEL Projects

- ◆ Flight Software Product Line Research
- ◆ ISC Process Engineering
- ◆ Reading and Inspections Project (with JPL)
- ◆ COTS studies

This Session

- *Measurement/Experimentation/Evaluation:*
The Flight Software Product Line Project
- *Packaging & Deployment:* ISC Process Engineering
- *Participating in the larger community:*
CeBaSE